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## A GASTROPOD DOMICILIARY IN SEA URCHIN SPINES

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Some years ago, in the "Triton" dredgings off Palm Beach, Florida, Thomas and Paul McGinty found that the sea urchin *Eucidaris tribuloides* (Lamarek) was occasionally found to have a very short and swollen spine or two among those of the normal cylindrical shape. On examination, these were seen to be spines modified to form cup-like "nests" of small white gastropods. One of these "nests" is drawn in Plate 6, figs. 7 and 8.

One of the sea urchins was kept alive for several days. The modified spines could be moved about slowly, like the others. The enlargement forming the nest begins above the smooth dark red band around the spine next to the joint, and is oval in shape, as in the drawings. It is often concealed by the body scales of the urchin. It is nearly rigid, though not quite as hard as the normal spines, and of about the same dull red color. The nest drawn is about 5.5 mm. long, 4.5 mm. in diameter. It had one large and three smaller inmates. Some other nests contained single snails.

The snails were retracted and quiet by day, but evidently active at night. Several were seen abroad early in the morning, one on a spine more than an inch from the nest, to which it returned later. However, I never saw one in motion, though I spent a good deal of time watching them.

The earliest reference I have found to a similar use of sea urchin spines is as far back as 1860: Hupé, in *Magazin de Zoologie* (2 ser.) 12: 118-125. He described a *Stylifer orbignyanus* from "Nouvelle Hollande." This Australian species has a very short spire and large last whorl and seems properly referred to *Stylifer*, but it apparently lives in much the same way as our Floridan species.